PN-ACB-694

POLIO ERADICATION: PREPARING FOR NATIONAL IMMUNIZATION DAYS, SOUTHERN NATIONS AND NATIONALITIES PEOPLES REGION, ETHIOPIA

11 September-1 October 1997

Mark Weeks

BASICS Technical Directive Number 000 ET 59 011
USAID Contract Number HRN-C-00-93-00031-00

TABLE OF CONTENTS

ACRONYMS

AFP	Acute Flaccid Paralysis
EPI	Expanded Programme on Immunization
ESHE	Essential Services for Health in Ethiopia (USAID/BASICS)
IEC	Information, Education and Communications
MCH	Maternal and Child Health
MOH	Ministry of Health
NIDs	National Immunization Days
OPV	Oral Polio Vaccine
RHB	Regional Health Bureau
SNIDs	Sub National Immunization Days
S.N.N.P.R.	Southern Nations and Nationalities Peoples Region
T.O.	Technical Officer (BASICS)
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VVM	Vaccine Vial Monitor
WHO	World Health Organization

EXECUTIVE SUMMARY

A USAID/BASICS technical officer (T.O.) visited Ethiopia between 11 September and 1 October 1997 to assist the Southern Nations and Nationalities Peoples Region (S.N.N.P.R.) with preparations for the country's 1997 National Immunization Days (NIDs). This year's NIDs is the first national polio immunization campaign in Ethiopia. 1,624,721 children below the age of five years in the S.N.N.P.R. are expected to receive two doses of OPV during two rounds of immunization, 13-15 November and 14-16 December. In addition, children between the ages of six months and below five years will receive a single dose of vitamin A during the second round in December. During this visit the T.O. participated in the regional NIDs planning workshop, worked with regional staff to finalize the 1997 NIDs work plan, and visited several health facilities in North Omo and K.A.T. Zones.

The NIDs regional planning workshop provided a good introduction on the purpose of NIDs, the tasks needed to prepare for and conduct NIDs, social mobilization, VVMs, and vitamin A. The participants from the zones and special woredas prepared realistic budgets. The remaining and more critical activities of planning and training in the woredas requires timely funding and as much follow up as possible from the regional level. The woredas need to begin as soon as possible to: 1) assess the vaccine storage space and ice making capacity in all facilities with refrigerators; 2) determine the quantity of available vaccine transport equipment; 3) carefully plan the locations of posts and vaccine distribution; and 4) determine all available mechanisms for mobilizing the communities. However, activities at this level cannot begin until the NIDs donor funds are received.

The observed cold chain functions well, but 109 (19 percent) of the 530 refrigerators in the region are not functioning. Facilities with nonfunctioning refrigerators should begin planning now for back-up cold storage for the NIDs OPV. Ice making capacity will not be adequate in all areas. Zones and woredas should plan a "fast chain," so that vaccine is disbursed from refrigerators to posts as close as possible to the days of immunization. With a shorter holding time from the refrigerator to the immunization post, perhaps only one ice pack per vaccine carrier may be sufficient. The MOH and WHO should experiment with holding times with fewer ice packs and provide guidelines to the health workers on transporting vaccine using less ice. The knowledge and use of VVMs will be critical for ensuring a reliable cold chain. To prevent wastage, stock outs, or over supply, the MOH, the RHBs, and the zones should establish a mechanism for rapid communication so that NIDs vaccine balances at all levels can be communicated immediately after the end of each round.

The priority for this year's NIDs should be to cover the more densely populated areas thoroughly. If additional days are required to complete NIDs, each round of NIDs should not go beyond one week. The less populated and more dry areas in the region are probably at a low risk for polio virus transmission.

After this year's NIDs, it will be useful to visit the rehabilitation centers in the region to collect any useful information about the polio patients to gain some insight on the prevalence and the risk areas for poliomyelitis. WHO and the RHB expressed interest in additional technical assistance from BASICS to help assess the first round and to prepare for the second round of NIDs.

PURPOSE OF VISIT

A USAID/BASICS technical officer (T.O.) visited Ethiopia between 11 September and 1 October 1997 to assist the Southern Nations and Nationalities Peoples Region (S.N.N.P.R.) with preparations for the country's 1997 National Immunization Days (NIDs) for polio immunization. The scope of work for this assignment is found in Appendix A.

BACKGROUND

The S.N.N.P.R. is one of the largest regions in Ethiopia, both in population and in land area. The region is divided into seven zones and five "special woredas" with a total of 77 woredas. The estimated population for 1997 is 11,064,818 with 1,624,721 children below the age of five years, the target age group for NIDs. Two zones in the region, Bench Maji and Gurage are only accessible from the regional headquarters in Awassa via Addis Ababa. Thus, some woredas and health facilities are over 1000 km from the regional headquarters.

The S.N.N.P.R. government health care system includes 407 static facilities with 2,243 outreach sites. Nearly all facilities and all outreach sites provide immunizations. The region has only four staff for managing and supervising routine immunization services throughout the region, as well as for implementing other major activities like a regional immunization campaign or disease surveillance. These staff include: the regional EPI coordinator, who is the only staff member with full time devoted to immunizations; the regional IEC specialist; the regional MCH coordinator; and the regional director for MCH and disease control. Because of the vast distances, the limited number of staff, and insufficient funding, routine visits by regional staff to all zones and special woredas are extremely difficult.

In health facility surveys conducted by BASICS in August 1995 and in September 1996 in the USAID/BASICS ESHE project, five focus woredas revealed that most health facilities were adequately equipped with cold chain equipment and vaccines. The BASICS survey also revealed that only 25 percent of the children between the ages of 12 and 23 months had a documented measles immunization. In October 1996 during an assessment of the region's vaccine and drug supply management systems, a BASICS T.O. also noted that health facilities were adequately or in some cases even overly equipped with cold chain equipment, as well as with vaccines. (BASICS Trip Reports: "Ethiopia Health Facility Assessment, Using Local Planning to Improve the Quality of Child Care at Health Facilities in the S.N.N.P.R." October 1996; "Strengthening

Vaccine and Drug Supply and Logistics Systems, ESHE Project, Southern National and Nationalities Peoples Region, Ethiopia,". 6 - 30 November 1996.)

NIDs are one of the key strategies for eradicating polio. During NIDs, all children in the country below the age of 5 years receive two doses of OPV during two periods (rounds) of immunization that last two to three days and are separated by four to six weeks. The purpose of mass polio immunization is to interrupt wild polio virus transmission by replacing the wild polio virus in the environment with the vaccine virus. The other strategies for polio eradication include house to house immunization, or 'mop up,' in high risk areas after several years of NIDs, and reliable disease surveillance for acute flaccid paralysis (AFP) to document the absence of polio.

The 1997 NIDs are the first national polio immunization campaign in Ethiopia. Last year sub-national immunization days (SNIDs) were conducted successfully in selected municipalities in the country, including Sidamo Zone and Awassa in the S.N.N.P.R. In 1996 Sidamo Zone and Awassa, which had an under five year old target population of 8,310, achieved 83 percent coverage for the first round and 92 percent coverage for the second round. This year the target population amounts to 1.6 million children. To cover the entire region, 3,482 additional immunization posts have been planned for a total of 6,132 immunization sites. In addition to OPV, a single dose of Vitamin A will be given to children from age six months to below five years during the second round in December. These children are to receive a follow-up dose through the routine health services.
The dates for the 1997 NIDs are 13-15 November and 14-16 December.

TRIP ACTIVITIES

12 September	Met with the USAID Health and Population Office, WHO/EPI, and MOH/MCH/EPI.
15-16 September	Participated in the S.N.N.P.R. NIDs planning workshop in Awassa for the zones and special woredas.
17-23 September	Assisted Regional Health Bureau (RHB) with finalizing the 1997 NIDs regional plan, preparing regional vaccine and supply distribution plans, and assessing cold chain capacity in the zones.
24-28 September	Visited the Northern Omo and K.A.T. Zones including health facilities in Alaba, Soddo, Arba Minch, and Chencha. Although Konso Special Woreda was visited, we were unable to meet with the EPI coordinator since we visited on Saturday and on a national and religious holiday (Meskel).

29 September	Reported observations and recommendations to the RHB and BASICS/Awassa.
30 September	Reported observations and recommendations to MOH, WHO, UNICEF, USAID, and BASICS during the weekly NIDs national coordination meeting.
1 October	Completed a draft trip report and submitted copies to USAID, BASICS, MOH, UNICEF, and WHO.

Appendix B lists the key persons met during the visit.

OBSERVATIONS AND RECOMMENDATIONS

During this visit NIDs preparations had been initiated at the regional and zonal levels, but not yet in the woredas and health facilities. Thus, the health facilities visited were not expected to be fully informed or in the planning phase for NIDs. The following summarizes the major observations from this visit. The recommendations below are based not only on the observations during this visit, but also on experiences with NIDs in other African countries.

Planning

The NIDs regional planning workshop for the zones and special woredas provided a good introduction on the purpose of NIDs, the tasks needed to prepare for and conduct NIDs, social mobilization, VVMs, and vitamin A. A list of key points to consider for planning NIDs was prepared and distributed to the participants (Appendix C). The participants prepared realistic budgets. **The MOH, WHO, and the RHB deserve credit for the efficient budgeting process by providing clear and consistent guidelines on the allowable costs.** The NIDs vaccine distribution from Addis Ababa to the region is found in Appendix D; the region's requirements for the 1997 NIDs are found in Appendix E.

The remaining and more critical phase, planning and training at the woreda level, requires timely funding and as much follow up from the regional level as possible. The woredas need to begin as soon as possible to: 1) assess the vaccine storage space and ice making capacity in all facilities with refrigerators; 2) determine the quantity of available vaccine transport equipment (vaccine carriers, cold boxes); 3) carefully plan the locations of posts and vaccine distribution, and 4) determine all available mechanisms for mobilizing the communities. However, the woreda level activities cannot begin until the NIDs donor funds are received

Recommendation: The MOH and WHO should make NIDs funding available to the regions as soon as possible so that preparations can be initiated in zones and woredas. The

late receipt of funds at the district or local level has been one of the greatest problems observed for NIDs in Africa.

Cold Chain

The observed cold chain functions well. However, the long term problems of broken refrigerators, motorcycles, and the lack of information on spare parts inventory and needs will complicate the planning of vaccine storage and distribution. According to information collected during the workshop, 109 (19 percent) of the 530 refrigerators in the region are not functioning. The region has begun to recall broken refrigerators to the zone and special woredas for repair, but **because of the lack of information on the repair and spare part needs, all of the broken refrigerators may not be repaired in time for the NIDs.**

Recommendation: Health facilities with nonfunctioning refrigerators should begin planning now for back-up cold storage for NIDs OPV. For example, many towns have *bunna bets* with refrigerators. Although such an arrangement may be considered inappropriate or an interference with someone's business, a carefully planned distribution, a "fast chain," would mean that only a few days storage would be necessary. NGOs are another alternative source for refrigerators.

Ice making capacity will not be adequate in all areas for the standard number of ice packs per vaccine carrier.

Recommendations: Zones and woredas should plan a "fast chain," so that vaccine is disbursed from refrigerators to posts as close as possible to the days of immunization. With a shorter holding time from the refrigerator to the immunization post, perhaps only one ice pack per vaccine carrier may be sufficient. The MOH and WHO should experiment with holding times with fewer ice packs and provide guidelines to the health workers on transporting vaccine using less ice. The knowledge and use of VVMs will be critical for ensuring a reliable cold chain.

Refrigerator space for NIDs OPV is generally adequate in places visited. However, the refrigerators also contained a large supply of routine EPI vaccines. One woreda visited did not have enough space for the large amount of NIDs vaccine.

Recommendation: The storage space required for NIDs and routine vaccines needs to be in every facility with a refrigerator. As noted above, facilities without adequate storage space need to look for a back-up refrigerator (e.g. NGO or local business). WHO guidelines on assessing vaccine storage space were given to the RHB.

In other countries a lack of information on the quantity of NIDs vaccine remaining after the end of the first round led to unnecessary rush ordering for additional vaccine for the second round. The lack of information on OPV remaining after the second round could also result in

unnecessary wastage or future over ordering for the routine supply. Another danger from a lack of information on NIDs vaccine balances is the potential for vaccine shortages.

Recommendation: The MOH, the RHBs, and the zones should establish a mechanism for rapid communication so that NIDs vaccine balances from all levels can be communicated immediately after the end of each round.

Coverage

An ambitious number of NIDs posts (6,132) have been planned in order to cover the entire region. If all planned posts are manned by a health worker, health workers in some areas may have to cover more than one post. This would increase the number of days for NIDs to be completed.

Recommendation: The priority for this year's NIDs should be to cover the more densely populated areas thoroughly. If additional days are required to complete NIDs, each round of NIDs should not go beyond one week.

Surveillance

There are two Catholic Rehabilitation centers in the areas visited. These centers might provide some useful retrospective information on the epidemiology of polio in the region.

Recommendation: After NIDs, it will be useful to visit the rehabilitation centers in the region to collect any useful information about the polio patients, particularly age and residence. Although information from rehabilitation centers has many limitations, the data might provide some insight on risk areas for poliomyelitis.

Social Mobilization

Preparations for social mobilization are going well. On departure the region was preparing for a regional meeting to sensitize political and religious leaders. The health workers interviewed seemed to be very familiar with ways to mobilize communities.

Technical Assistance

During the visit the RHB and WHO expressed interest in additional technical assistance from BASICS for the NIDs to assist the S.N.N.P.R. health bureau with assessing the first round and with preparing for the second round.

WHO EPI Training Proposal

The USAID BASICS/ESHE project chief of party requested comments on WHO's proposal on "Developing a National Training Programme in Ethiopia" (Appendix F). A summary of the comments is found in Appendix G.

SUMMARY OF RECOMMENDATIONS

1. The MOH and WHO should make NIDs funding available to the regions as soon as possible so that preparations can be initiated in zones and woredas.

2. Areas with nonfunctioning refrigerators should plan now for back-up vaccine storage.

3. The zones and woredas should plan a "fast chain" so that vaccine is disbursed from refrigerators as close as possible to the days of immunization. With a shorter holding time from the refrigerator to the immunization post, perhaps only one ice pack per vaccine carrier may be sufficient. The MOH and WHO should experiment with holding times with fewer ice packs and provide guidelines to the health workers on transporting vaccine using less ice. The knowledge and use of VVMs will be critical for ensuring a reliable cold chain.

4. Every facility with a refrigerator should determine the storage space required for NIDs and routine vaccines. As noted above, facilities without adequate storage space need to look for a back up refrigerator (e.g. NGO or a local business).

5. The MOH, the RHBs, and the zones should establish a mechanism for rapid communication on NIDs vaccine balances immediately after the end of each round of immunization.

6. The priority for this year's NIDs should be to cover the more densely populated areas thoroughly. If additional days are required to complete NIDs, each round of NIDs should not go beyond one week.

7. After the NIDs, it will be useful to visit the rehabilitation centers in the region to collect any useful information on polio patients, particularly age and residence.

FOLLOW UP REQUIRED

The **USAID BASICS/ESHE** project can assist with the NIDs by checking on preparations in the project focus woredas during their routine visits. Appendix H lists key items to check.

Timely release of the NIDs donor funding is critical for initiating woreda, health facility, and community preparations, and for continuing follow up visits by the regional team to the zones. **WHO and the MOH** are urged to disburse NIDs funding as soon as possible.

The **RHB** should continue their visits to ensure that the zones and woredas are planning and organizing the specific tasks for: distributing vaccines, maintaining the cold chain, and conducting social mobilization.

BASICS/Washington could provide additional technical assistance for this year's NIDs by assisting with assessing the first round and with preparations for the second round. Any additional assistance requires a request to BASICS from **USAID** and the **MOH**.

APPENDIXES

APPENDIX A
Scope of Work

APPENDIX A

Scope of Work

Technical Assistance for National Immunization Days - Ethiopia

10 September - 2 October 1997

1. BASICS Technical Officer Mark Weeks will travel to Ethiopia o/a 10 September - 2 October 1997 to assist the Ministry of Health in the Southern National and Nationalities Peoples Region with planning, preparations, and training for the National Immunization Days scheduled for November 1997. The assistance will be applied in a manner which strengthens the routine EPI and basic health services.

2. This assignment will contribute to: (a) ensuring logistical and cold chain preparedness; (b) developing a tool for supervision and monitoring during the days of immunization, and (c) identifying significant obstacles/constraints to implementation of the NIDs and formulating solutions for the problems identified.

3. The BASICS Technical Officer will work jointly with Ministry of Health staff in the region. No logistical support from the Mission will be necessary. Funding for this assignment will be provided from BASICS central funds for the USAID Polio Eradication Initiative.

4. The BASICS Technical Officer will brief and debrief with the Mission at the beginning and at the end of this visit.

APPENDIX B
Persons Contacted

APPENDIX B

PERSONS CONTACTED

MOH	
Wro Hiwot Mengistu	Child Health, Team Leader
Dr. Makonnen Admassu	MCH (EPI Program Manager)
S.N.N.P.R.	
Dr. Estifanos Birru	Regional Medical Director
Dr. Sahle Sitti	MCH Family Health Director (EPI Manager)
Sr. Senait Philpos	MCH Coordinator
Sr. Abebech Sema	EPI Coordinator
Ato Demoze Firde	IEC Expert
K.A.T. Zone	
Dr. Lambiro Wamisho	Disease Control and Prevention, Head
Ato Dejene Hailu	EPI Coordinator
Soddo Health Centre	
S/r Lebanesh	EPI Coordinator
S/r Marta	In Charge Nurse
N. Omo Zone	
Ato Belete Sumudo	EPI Coordinator
Dr. Kassahun	Disease Control and Prevention, Head
Chencha Hospital	
Ato Dongee Wude	EPI Coordinator
Dr. Girum Hailu	Medical Officer
Ato Asefa Desolegn	Hospital Administrator
UNICEF	
Dr. Wondimagegnehu Alemu	Health Project Officer
USAID	
Dr. Carmela Abate-Green	Senior Technical Advisor, Child Survival
Dr. Hanna Neka Tebeb	Team Leader, IR3
WHO	
Dr. Bernard Moriniere	Epidemiologist, WHO/Addis Ababa
Ms. Grace Kagondu	WHO/AFRO/EPI, STC Social Mobilization
Mr. Bertrand Jacquet	EPI Logistics Officer, WHO/Addis Ababa

BASICS/ESHE

Dr. Vincent David	Chief of Party
Dr. Paul Freund	Deputy Chief of Party, Awassa
Dr. Sjoerd Postma	Health Planner, Awassa
Dr. Mengistu Asnake	PPHC, Awassa
Dr. Mulugetta Betre	PPHC Officer, Awassa

APPENDIX C
Key Points for Planning NIDs

APPENDIX C

Key Points for Planning NIDs

1. **Organization and Communication**
   - Who is responsible for what? (Logistics, cold chain, social mobilization, etc.) At all levels (Zone, Woreda, post)
   - How and when will the different levels communicate before, during and after NIDs

2. **Information**
   - target populations
   - OPV requirements
   - Vitamin A requirements
   - number and location of posts
   - number of health workers
   - number of volunteers
   - refrigerators (condition; repair needs)
   - cold boxes
   - vaccine carriers (available; needed)
   - ice packs (available; needed)
   - vehicles (available; needed)
   - posters
   - other support (NGO's other govt.)

3. **Logistics and Cold Chain**
   - OPV and Vitamin A distribution plan; how, when, and from where (Awassa, Addis)
   - vaccine carrier distribution plan with schedule
   - plan for making and distributing ice
   - policy and plan for unused vaccine after rounds 1 and 2
   - How and when will vaccine balances be reported at the end of the round?
   - contingency plan for vaccine or ice shortages during NIDs

4. **Social Mobilization**
   - local strategies (who, how, when)
   - primary messages for polio and vitamin A
   - distribution of materials
   - how will posts be marked
   - resources for communicating messages (NGOs, churches, mosques, etc)
   - special events or meetings

5. **Training**
   - Who will train at each level
   - number of and schedule for workshops
   - content for each level (health workers, volunteers)
   - extra information (VVMs, vitamin A)

6. **Monitoring, Supervision, Evaluation**
   - reporting: what, how, when, and by whom
   - logistics plan for supervision
   - review meeting after NIDs

7. **Accountability for NIDs Funds and Contributions**

APPENDIX D
NIDs Vaccine and Vaccine Carrier
Distribution Plan, S.N.N.P.R.

APPENDIX D

OPV and Vaccine Carrier Distribution for 1997 NIDs - S.N.N.P.R.

From Addis to:	OPV Doses	Storage Req.
Arba Minch		
North Omo	1,020,255	1,020 l.
South Omo	128,388	128 l.
Konso	61,603	62 l.
Dirashe	35,247	35 l.
Total	1,245,493	1,245 l.
Wolkite		
Gurage	609,107	609 l.
Yem	25,328	25 l.
Total	634,435	634 l.
Bonga		
K/Shekicho	284,075	284 l.
Bench Maji	127,640	128 l.
Total	411,715	412 l.
Awassa		
Sidama	800,833	801 l.
Gedeo	221,437	221 l.
Amaro	38,425	38 l.
Burgi	15,208	15 l.
Total	1,075,903	1,076 l.
Hosana		
K.A.T.	284,853	285 l.
Hadyia	411,155	411 l.
Total	696,008	696 l.
Region Total	**4,063,554**	

From Addis to:	Vaccine Carriers Needed	Vaccine Carriers Available [1]	Comments
Arba Minch			
North Omo	1,506	1,470	
South Omo	468	458	
Konso	134	130	
Dirashe	54	54	
Total	2,162	2,112	Direct from Addis; one container
Wolkite - Bonga			
Gurage	940	838	
Yem	92	82	
K/Shekicho	828	737	
Bench Maji	296	263	
Total	2,156	1,920	Direct from Addis; 20 pallets
Awassa			
Sidama	700	610	
Gedeo	234	205	
Amaro	130	115	
Burgi	60	55	
K.A.T.	330	290	
Hadyia	360	317	
Total	1,814	1,592	From Addis: 1/2 container (1400) + 2 pallets
Region Total	6,132	5,624 [1]	NIDs vaccine carriers in Addis

APPENDIX E
Requirements for 1997 NIDs, S.N.N.P.R.

APPENDIX E

Requirements for National Immunization Days: 14, 15, 16 November; 12, 13, 14 December; S.N.N.P.R.

Zone/ S. Woreda	Pop. < 5 years	OPV (doses)	Vit. A (capsules)	Vaccination Posts				Personnel			Cold Chain					
				Static	O/reach	Add.	Total Posts	H/staff	Vols.	Sups.	Vaccine Carriers		Ice Packs		Cold Boxes	
											Need	Avail.	Need	Avail.	Need	Avail.
Sidama	320,333	800,833	1,281,332	63	287	350	700	700	1,400	70	700	63	35,000	300	63	25
Gedeo	88,575	221,437	354,300	22	95	117	234	234	468	24	234	?	936		5	
K.A.T.	113,941	284,853	455,764	22	143	165	330	330	660	33	330	20	700	100	20	10
Hadiya	164,462	411,155	657,848	35	145	180	360	360	720	36	360	26	900		50	
North Omo	408,102	1,020,255	1,632,408	101	652	753	1,506	1,506	3,012	151	1,506		6,024		10	
South Omo	51,355	128,388	60,619	27	207	234	468	468	936	47	468		1,000		10	27
Gurage	243,643	609,107	974,572	46	424	470	940	940	1,880	94	940		1,880		11	10
K/Shekicho	113,630	284,075	454,520	41	371	416	828	828	1,664	83	828		1,664		30	
Bench Maji	51,056	127,640	204,224	30	118	148	296	296	592	30	296		?		?	
Konso	24,641	61,603	98,504	8	59	67	134	134	268	13	134	5	536	56	10	4
Derashe	14,099	35,247	56,396	7	20	27	54	54	108	6	54		32		8	
Amaro	15,370	38,425	61,480	5	60	65	130	130	260	13	130		260		2	
Burji	6,583	15,208	24,332	4	26	30	60	60	120	6	60	10	100	10	10	3
Yem	10,131	25,328	40,524	6	40	46	92	92	184	9	92		368		-	
Total	1,625,921	4,063,554	6,356,823	417	2,647	3,068	6,132	6,132	12,272	615	6,132	124	49,400		229	79

18/9/97

APPENDIX E (cont.)

Requirements for 1997 National Immunization Days, S.N.N.P.R.

Zone/ S. Woreda	Social Mobilization Materials												Total Cost
	Posters		Leaflets		Mega.	Batteries		T- Shirts		Paper Caps			
	Quantity	Cost (1.5)	Quantity	Cost (.75)	Quantitiy	Quantity	Cost (3)	Quantity	Cost (10)	Quantity	Cost		
Sidama	2,800	4,200	13,000	9,750	9	360	1,080	2,000	20,000	13,000	6,500		41,530
Gedeo	900	1,350	4,400	3,300	6	240	720	700	7,000	4,400	2,200		14,570
K.A.T.	1,300	1,950	6,200	4,650	5	200	600	990	9,900	6,200	3,100		20,200
Hadiya	2,100	3,150	6,800	5,100	5	200	600	1,080	10,800	6,800	3,400		23,050
North Omo	6,000	9,000	28,600	21,450	25	1,000	3,000	4,500	45,000	28,600	14,300		92,750
South Omo	1,800	2,700	1,700	1,275	6	240	720	270	2,700	1,700	850		8,245
Gurage	3,700	5,550	17,800	13,350	15	600	1,800	2,800	28,000	17,800	8,900		57,600
K/Shekicho	3,300	4,950	15,800	11,850	10	400	1,200	2,500	25,000	15,800	7,900		50,900
Bench Maji	1,770	2,655	5,600	4,200	8	320	960	888	8,880	5,600	2,800		19,495
Konso	530	795	2,500	1,875	2	80	240	400	4,000	2,500	1,250		8,160
Derashe	220	330	1,000	750	3	120	360	160	1,600	1,000	500		3,540
Amaro	530	795	2,400	1,800	3	120	360	390	3,900	2,400	1,200		8,055
Burji	250	375	1,100	825	2	80	240	180	1,800	1,100	550		3,790
Yem	370	555	1,700	1,275	3	120	360	270	2,700	1,700	850		5,740
Region	50	75	1,000	750	0	0	0	250	2,500	500	250		3,575
Total	25,620	38,430	109,600	82,200	102	4,080	12,240	17,378	173,780	109,100	54,550		361,200

18/9/97

APPENDIX E (cont.)

Requirements for 1997 National Immunization Days, S.N.N.P.R.

Zone/ S. Woreda	Budget (ETB)					
			Social Mobilization			
	Personnel	Planning	Activities	Materials	Transport	Total
Sidama	210,000	105,000	84,000	41,530	43,864	484,394
Gedeo	70,200	35,100	28,080	14,570	14,040	161,990
K.A.T.	99,000	49,500	39,600	20,200	16,892	225,192
Hadiya	108,000	54,000	43,200	23,050	34,200	262,450
North Omo	451,800	225,900	180,720	92,750	75,300	1,026,470
South Omo	140,400	70,200	56,160	8,245	23,400	298,405
Gurage	282,000	141,000	112,800	57,600	49,266	642,666
K/Shekicho	248,400	124,200	99,360	50,900	94,838	617,698
Bench Maji	88,800	44,400	35,520	19,495	26,640	214,855
Konso	40,200	20,100	16,080	8,160	6,700	91,240
Derashe	16,200	8,100	6,480	3,540	3,380	37,700
Amaro	39,000	19,500	15,600	8,055	8,125	90,280
Burji	18,000	9,000	7,200	3,790	3,000	40,990
Yem	27,600	13,800	11,040	4,640	6,440	63,520
Region	0	153,980	73,584	3,575	40,608	271,747
Totals	1,839,600	1,073,780	809,424	360,100	446,693	4,169,497

Zone/ S. Woreda	Equipment			
	Refrigerators		Motor Cycles	
	Functional	Non Funct.	Functional	Non Funct.
Sidama	79	25	15	21
Gedeo	29	5	12	4
K.A.T.	13	5	-	-
Hadiya	18	8	15	6
North Omo	101	13	30	37
South Omo	27	10	10	23
Gurage	43	11	27	13
K/Shekicho	37	10	14	7
Bench Maji	42	11	16	12
Konso	10	2	6	7
Derashe	8	2	7	4
Amaro	7	1	6	-
Burji	2	2	-	-
Yem	5	4	3	3
Totals	421	109	161	137

1. The cost for Social Mobilization materials is not included in Total Cost for the Region.

APPENDIX F
"Developing a National Training Programme in Ethiopia"

Draft
Stilwell 1997

World Health Organization
Expanded Programme on Immunization

Developing a National Training Programme in Ethiopia

Background

In 1995 the Expanded Programme on Immunization (EPI) in Ethiopia was reviewed by the Family Health Department, Ministry of Health, in collaboration with USAID, UNICEF and WHO. This extensive review not only described the status of the national immunization programme, but also identified obstacles to achieving programme objectives. Training in the EPI programme was included in the review, as part of the section on technical support, and the report stated that:

'The review team was impressed with the commitment and capability of the staff at all levels of the health service system. Many of the staff interviewed, however, expressed a desire for additional training and/or reported that activities were hampered by the lack of qualified staff. Most staff reported a need for training in their specific technical area and the need for training in management.'

Recent discussion of training needs with EPI staff in Ethiopia confirm that little has changed since the joint review reported in 1995. While the commitment of staff remains, there are few training opportunities: for some staff it is 15 years since they were able to attend an EPI related course.

The present proposal arises following recent discussions in Ethiopia, between national officials and staff from AFRO, at which interest was expressed in devising a comprehensive programme of training to meet the needs of staff at all levels. This was subsequently supported by the Interagency Co-ordinating Committee, meeting in Addis Ababa in March.

Aim and objectives of the training project

The aim of the project is for UNICEF, BASICS and WHO staff to collaborate with EPI programme staff in order to build the training capacity for EPI in Ethiopia. The objectives of the project are therefore to:

◊ build the capacity of the Regional Health Bureaux (RHB) to conduct training courses relevant to EPI by supporting them in:

a) assessing the current learning needs of EPI staff at all levels
b) preparing a training plan which will meet the identified needs
c) assisting with the implementation of a training strategy, identifying resources as necessary

24

- 0 in collaboration with the RHB, evaluate the training strategy in terms of performance change as well as knowledge gain
- 0 identify factors which either support or hinder the implementation of new training strategies.

Project plan

The project will have four distinct phases: assessment of learning needs, planning of training activities, implementation of programmes and evaluation of outcomes. It is vital that EPI staff are able to participate fully in all of these phases, both to advise in the assessment phase, and to assist in designing programmes which are relevant and realistic for Ethiopia. This proposal reflects the necessarily incremental nature of a collaborative project such as this.

Phase 1

A comprehensive assessment of learning needs should be carried out at all levels of the health care system. Ethiopia has 11 regions, 71 zones, about 500 weredas and 2000 health facilities. Each level is to be sampled, concentrating on two regions. The final decision regarding the regions to be included will be taken with national EPI officials.

The assessment of learning needs will use a triangulation method, in order to capture both subjective and objective data. Objective data will be sought from two regions regarding the numbers of staff involved in EPI, their job descriptions, locations, and basic and continuing training records. In collaboration with the regional staff, a sample of health care facilities will be selected at all levels in the region, and visited by the review team. Visits will provide opportunities for subjective and objective observations. EPI staff will be asked for their own estimation of their learning needs, using a semi-structured questionnaire to organise information. Observation of practice, guided by a prepared checklist will provide objective data about standards of practice, and areas needing improvement. Cross-checking of observations by two or more observers will strengthen the validity of findings.
Collation of these data will offer a comprehensive view of training needs in two regions at all levels of care, and this can be used to inform the next phase of the project.

In addition, information will be collected from Schools of Public Health, Schools of Medicine and Nursing regarding the educational expertise to support the preparation of a cadre of 'master trainers' in Ethiopia. An inventory will be prepared of the expertise available, and the interest in the project. These links will offer an opportunity to consider jointly with the Schools how pre-service curricula content prepares new health workers to deliver effective vaccines safely, and to acquire and use skills in epidemiology and public health. Major curriculum revision will require the development of an additional project.

25

Phase 2

During the second phase, a training plan will be formulated. The learning needs assessment will be used as a basis for this.
This process will be co-ordinated by a training manager for Ethiopia, and funding will be sought to secure this post. The training manager will be supported by collaborating institutions as necessary. It is proposed that the existing Interagency Co-ordinating Committee be asked to become the steering committee for the project, with additional members convened as appropriate.
Although it is not possible to be definitive about the outcome of this phase of the project, there are several points which must be considered in designing a training programme. Firstly, so called cascade training has been shown to be ineffective in a number of situations, and for many reasons. (Bryce et al, 1993) While this method is a tempting one to use, its application should be considered carefully. The questions which need to be posed focus on the skills of those trained to train others, the time they have to do this and the support they receive to train others on a continuing basis.
Secondly, it is important to include managers in training opportunities, because there are often resource implications when practice changes as a result of training.
A third point is the need for continuing education, rather than an isolated course. In order to achieve this, a record system is required, as well as a programme of training activities.
A further consideration is the need to ensure that the programme is sustainable within the Ethiopian system, and its resources.
Finally, the nature of training activities must also be considered. Training is not only short courses, but can also encompass changes in usual activities, such as secondment to another part of a programme for several weeks, supervision in post which is to aid learning rather than to manage, and self-directed learning activity. A range of training activity has many advantages if it is sustainable; chief among these is improved motivation and changes in practice.

Phase 3

The training programme will be implemented gradually during this phase. A number of activities will probably take place simultaneously: master trainers will be prepared; materials will be reviewed; managers will be trained. There may be opportunities for some staff to be trained outside Ethiopia when this is appropriate, and this could begin immediately.

The role of the Interagency Co-ordinating Committee as a steering group will be especially important during this phase, to advise on implementation strategy, to review materials, to continue to motivate staff, and support the training manager. A possible plan for implementing the training strategy is appended, but it is stressed that this is provisional, and subject to change by the steering group and after the learning needs assessment.

Phase 4

This is the evaluation phase. It is vital that evaluation is carried out on a number of levels: reaction to the programme (quality, usefulness, appropriateness): learning from the programme (has knowledge been gained?): performance changes (has the programme affected practice?): impact on the population (is there a health gain as a result of practice changes and the programme?).

As well as this evaluation, a further assessment will be made of the project itself, in order to identify those factors which either promote or hinder change taking place. This will offer important information for other programmes and projects in other places, even though to some extent it will be population specific.

Evaluation will be repeated at intervals, to review the sustainability of the programme, and its continued outcomes, and further funding will be sought for this stage of the project.

Outcomes

In meeting the objectives of this project, there are 4 major outcomes:

- increased capacity of the RHBs to plan, organise, conduct and evaluate training programmes relevant to EPI
- a sustainable EPI training programme for Ethiopia, based on a learning needs assessment and designed with the full participation of EPI country staff
- identification of factors which affect the processes of change
- comprehensive evaluation of a training programme.

Reference

Bryce J, Cutts F, Naimoli J, Beesley M; What have teachers learnt?; The Lancet, vol 342, 160-162, 1993

APPENDIX G
Comments on WHO's "Developing a National Training Programme in Ethiopia"

APPENDIX G

Comments on WHO's "Developing a National Training Programme in Ethiopia."

Aim and objectives of the training project

The impact of this project will be greater if it aims at developing regional capacity to conduct routine in service training on all aspects of health care delivery, not only immunization. It will be a tremendous missed opportunity if health workers only receive training on immunization specific topics when many of the skills and concepts required for giving immunizations, such as supply management, monitoring, and infection control, also apply to the delivery of other health services.

Rather than aiming at specialized training courses, teaching how to train would provide a better and more sustainable foundation for improving the quality of all health services. In a country as large and diverse as Ethiopia and with such few staff at the central level, it is more critical to develop a **process** from which the **regions** can strengthen their own training programs, rather than to conduct a series of specific training sessions over a limited period of time.

Project Plan

Phase I

Inadequate training in Ethiopia is a systemic problem owing to, not only infrequent training, but also to frequent transferring of staff. If, as pointed out in the EPI programme review, some staff have not had EPI training for 15 years, then a "comprehensive assessment" would not be necessary, or the best use of human and financial resources. It would be better to just start from the beginning. I do not mean to imply that an assessment is not necessary, only that a great deal of time and resources for a conducting "comprehensive" assessment are not warranted when the fundamentals are not yet in place. Only assessing "EPI" training needs would be a missed opportunity. Rather than conducting a "comprehensive assessment" in two regions, it would be better to develop a simplified needs assessment **process** which the regions could use to perform their own assessments.

Including the existing health training institutions in the project for eventually improving pre-service training nation wide is an excellent idea. However, developing a national "cadre of master trainers" is probably not sustainable and a missed opportunity if they only cover EPI. As mentioned above, capacity building should focus on the regional level.

Phase 2

Training plans should be region specific and developed by and in the regions.

I don't think that the EPI ICC would be the best group for overseeing the development of a training program. Members are not necessarily well experienced with training and training methods.

In addition, members of the ICC have many other responsibilities. Awaiting their decisions and concurrence would probably delay the project. A more specific committee including experienced "Trainers" would be more efficient and more effective.

Agreed, "cascade training" or training of trainers who train trainers ... is ineffective. Also, I highly agree with the proposal's statements on the importance of continuing education and sustainability. However, I'm not sure that the rest of the document adequately covers these areas in terms of the proposed activities.

Phase 3

Training outside Ethiopia will not have much impact on improving the quality of training, and probably will not be appropriate, except possibly for some Africa based programs.

Phase 4

ok.

Outcomes

Except for the EPI specific focus, these outcomes seem more in tune with a decentralized and more sustainable training program. Perhaps it's just my interpretation, but the rest of the proposal seems to advocate a more centralized approach.

Other

Add a component on developing capacity for providing on the job training through supervisors. Supervisors should be reinforcing the formal training that the health workers are receiving.

M. Weeks, BASICS
8 Oct. 1997

APPENDIX H
NIDs Check List for Zones and Woredas, S.N.N.P.R.

APPENDIX H

NIDs Check List for Zones and Woredas - S.N.N.P.R.

Name of Zone/Woreda: _____ Date of Visit: _____

☐ Resources for Social Mobilization identified (local leaders, church, mosque, etc.).

☐ NIDs sensitization meeting scheduled or held.

☐ Social mobilization activities planned for informing community about NIDs..

☐ Location of NIDs posts identified.

☐ Local target populations available.

☐ Vaccine and Vitamin A distribution plan prepared for both rounds.

☐ All refrigerators functioning or taken for repair.

☐ Refrigerator space adequate for NIDs and routine vaccine.

☐ Freezer space adequate for making ice packs for NIDs.

☐ Training dates set for Woredas, or health staff and volunteers.

☐ NIDs guide distributed.

☐ IEC materials distributed.